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TITLE : METHOD FOR MEASURING HEMOGLOBIN

ABSTRACT : PURPOSE: To enable the direct and continuous measurement of the fluctuation in the content of hemoglobin (Hb) in blood by an optical technique from a living body by selecting the specific two different wavelengths at which only the change in the absorbancy by Hb is substantially changed in a $\geq 700\text{nm}$ wavelength region.

CONSTITUTION: The specific two different wavelengths at which only the change in the absorbancy by the Hb is substantially generated in the $\geq 700\text{nm}$ wavelength region are selected and the light rays of these wavelengths are directly projected to the biotissue. The measurement is then made in accordance with the changes ΔA_1 and ΔA_2 in the absorbancy with the respective wavelengths, K_1 ; the absorption coefft. of the oxidation type Hb at the wavelength λ_1 , K_1' ; the absorption coefft. of the deoxidation type Hb at the wavelength λ_1 , K_2 ; the absorption coefft. of the oxidation type Hb at the wavelength λ_2 , K_2' ; the absorption coefft. of the deoxidation type Hb at the wavelength λ_2 . Namely, the fluctuation in the respective quantities of the oxidation type Hb and the deoxidation type Hb and/or the fluctuation in the total Hb quantity in the optical path for irradiation is directly and continuously measured.

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